California is the only State in the Union that has a complete registration of its rejected and discharged tuberculous soldiers. No small amount of this success is due to the supervisors in nearly all of the counties in the State, and to the excellent initiative and organizing ability of the Bureau of Tuberculosis of the State Board of Health.

EDITORIAL COMMENT.

Members of the Medical Society of the State of California who have received literature from the Red Chevron Organization, requesting them to donate their services to the cause, are hereby warned that the Red Chevron was investigated at the last meeting of the Council, and the Council does not give its approval to this organization. A full discussion of the matter will occur in our next issue.

It is worth remembering that every punctured wound of the foot, especially that most frequent variety due to stepping on rusty nails, is a potential cause of tetanus. Every such wound should be treated by immediate free incision, permitting hemorrhage, then swabbed with phenol, followed by alcohol. A compress dressing should be applied which will allow access of oxygen, keep the wound open for a time and protect against further contamination. The adjacent skin should be iodined. 1500 units of tetanus antitoxin should be administered hypodermically at once. Remember that tetanus bacilli are anaerobic, spore-bearing, and most apt to occur in material contaminated with horse manure, hence especially in street dust, and that the toxin travels along the peri-neural lymph channels from wound to central nervous system.

COMFORT STATIONS.

Public accommodation is being met by some large cities in different ways. In the East, a number of the cities have constructed stations at expenditures varying from $6,000 to $18,000. The more expensive stations include news and bootblack stands, with a view of making them self-supporting. Other cities have used an idea suggested by the International Public Comfort Station Association: That of various merchants in the city displaying a neat little sign, designated by the city, which shows or indicates that within there is a comfort station for the accommodation of either men or women, or both. This system, so far, seems to have met with success. It saves the city a heavy expenditure for new buildings, and also benefits the merchant by material increase in business. It has been suggested that stations be located at the junction points of some of our automobile roads where traffic is very heavy, and that a sufficient amount of ground be reserved for future growth.—Bulletin, Los Angeles Health Department.

Original Articles

THE PREVENTION OF BLINDNESS WORK OF THE STATE INDUSTRIAL ACCIDENT COMMISSION.*

By WILL J. FRENCH,
Member California Industrial Accident Commission, San Francisco.

The earliest reference to "Safety First" I have been able to find is in Chapter 22, verse 8, of Deuteronomy, the fifth book of Moses, where these words appear: "When thou buildest a new house, then thou shalt make a battlement for thy roof, that thou bring not blood upon thine house, if any man fall from thence."

The foundation of English common law is taken from the five books of Moses, from Genesis to Deuteronomy, and we can there read much that represents the highest ideals of present-day civilization. If they had used emery-wheels in those days, I think we would be able to read a verse following the one quoted about like this: "When thou grindest tools on the emery-wheel; then thou shalt use a hood over the wheel and goggles over thine eyes, that thou bring not blindness upon thine house because of dust entering the windows of thy soul."

The National Safety Council estimates there is one worker killed every fifteen minutes, day and night, in the United States, and one injured every sixteen seconds, day and night. This gives us more than 30,000 killed and about 2,000,000 injured. It is estimated that out of this number there are 200,000 eye injuries. The National Committee for the Prevention of Blindness states there are 100,000 blind persons in the United States and that more than 50 per cent. are needlessly blind.

There are, in round figures, 1,000,000 employees in the State of California. There are 300 industrial injuries each working day, excluding Sundays, in the State. We thus have approximately 100,000 industrial injuries each year in California. In 1914, 1915 and 1916 there were 23,451 eye injuries. Of this number 549 were permanent injuries and 22,902 temporary injuries. There were 11 cases of total blindness. The medical and compensation costs for these eye injuries will be about $788,000. It is impossible to give a definite amount at this time, because the 11 cases of total blindness call for life pensions, and we have simply computed the amounts that would be paid the injured men, based on the mortality tables used by the insurance companies. The time lost by the 22,902 temporary injuries was 234.3 years. This means that we found just what each man lost; one man might lose a day from work, another man a week, and another man six months, and so on. We added the total together and got the 234.3 years. We have in California 26 eye injuries each working day and the number will grow larger as there is an increase in the total of employees, especially when we consider the large groups of men that are employed in the shipbuilding plants who are more

* Synopsis of address delivered on May 28, 1918, before the Section on Eye, Ear, Nose and Throat of the San Francisco County Medical Society.

likely to sustain eye injuries because of the continual chipping of steel and use of emery-wheels and machinery used in the construction of ships.

The Industrial Accident Commission advocates the wearing of goggles whenever workmen are liable to have their eyes injured. An individual pair of goggles for each man is advised because of the advantage of interesting him in what is practically his property and for the further good reason that men naturally object to wearing goggles that have been promiscuously used. The use of masks is urged for welders and babbitters. These goggles and masks are so strongly constructed that they not only fit the eyes but have shields at the side of each lens to prevent flying chips from entering the eyes from the sides.

Printed matter is used to advantage in emphasizing preventive methods. The National Safety Council issues posters drawing attention to the value of wearing goggles and masks. Sometimes these notices are printed in foreign languages. Special phrases are apt to attract the attention of workmen. For instance, one phrase that rivets the attention is: "You can see through glass goggles, but you can't see through glass eyes."

In all accident-prevention work the shop or factory safety committees are able to do much to reduce the death and injury tolls. Members of such committees will prevent a worker using his finger or his handkerchief, or a toothpick, in removing foreign bodies from the eye. This alleged "shop doctor" can do more mischief than an oculist can undo. Immediate and competent medical care may not only save the sight of an eye but save the employer or insurance company a considerable sum of money.

One serious objection to the use of goggles or masks in hot places is that the glass becomes clouded. There are available different kinds of "Anti-Sweat Pencils" that brighten the glass and prevent the clouded effect for several hours after each application.

The International Association for Labor Legislation has issued a list of 56 industrial poisons, of which number 36 affect the eyes. There is a continual effort to counteract the effect of these poisons and new inventions or methods are utilized as soon as they become known. The Commission recognizes the deleterious effects of wood alcohol and urges the use of denatured alcohol. The latter is just as good as wood alcohol and is safe and its use will save the sight of many an eye.

Properly ventilated and lighted workrooms have an important place in saving eyesight. Unshaded or flickering light should be avoided. Each shop or factory that has a saw-tooth roof with the upright portion filled with glass not only supplies the light for workmen so much to be desired, but enables them to escape that eye-strain that later on will lead to trouble. Dangerous fumes, vapors and gases can be removed by hoods and exhausts. The missed hole in blasting is a contributing factor to injured eyesight, and occasionally causes total blindness. The Commission's Mine Safety Rules require extraordinary care to see that all the shots have been fired. "Mushroomed" tools should be replaced by good tools so that the chances of flying steel and iron are minimized. Precautions can easily be taken by means of special eye coverings to protect the eyes of men working among acids or engaged in sand blasting.

The Commission maintains a Safety Museum at 529 Market Street, San Francisco, and visitors are cordially invited. Among the more than 250 exhibits are eye protective devices, goggles and masks, as well as signs and posters, all aimed to throw every safeguard around the eyes of men and women that work in factory, shop or office. There will also be found a number of goggles broken by chips of flying steel or other material. The lenses are so strongly constructed that it is almost impossible to break them from the outside, though it is comparatively easy to break the glass by using pressure from the inside. As flying chips always strike the outside, this special construction gives the necessary protection to the eye.

A PLEA FOR A COMPLETE UROLOGICAL DIAGNOSIS AT ONE SITTING.

(Preliminary Communication.)

By MARTIN KROTOSZYNER, M. D. and GEO. W. HARTMAN, M. D., San Francisco.

In a recent comprehensive treatise, dealing with the "comparative result of various functional kidney tests" [1], a table is presented containing, in historical sequence, a fairly complete list of the many tests that have been devised for determination of renal function, the majority of which were introduced during the last fifteen or twenty years, or since the dawn of the era of scientific urology. As a result of this overproduction of renal tests, which were thrust upon the profession so frequently and at such short intervals as to prevent the average clinician familiarizing himself with their meritorious or objectionable features, a deplorable lack of uniformity has developed among urologists in various parts of the world as regards the estimation of the clinical value and preferential application of these tests. In diagnostically difficult cases, therefore, and especially in the relatively large numbers of renal lesions, where the indication for a radical operative procedure (nephrectomy), not rarely depends upon comparatively small differences in functional values, it has become customary at many clinics to perform several tests repeatedly at different cystoscopic sittings, in the hope of clinching, in this way, the preoperative diagnosis in a more exact manner.

It goes without saying, that some urological problems, even in most experienced and skilful hands, can only be solved on the basis of painstaking investigation, entailing more than one, and sometimes many prolonged cystoscopic sittings. In these comparatively rare cases, of course, the pain and discomfort to the patient, and the loss of time to the physician, incidental to repeated instrumentation, must be considered insignificant drawbacks as compared with the advantage of establishing by these means the otherwise unattainable diagnosis. This, though, is not true of the great majority of alleged or real lesions of the upper urinary tract, where at present the various